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Using Social Media Technologies for Teaching and Research

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Social media

- Social media is an online environment opened for the purposes of mass collaboration
- all invited participants can create, post, rate, enhance, discover, consume, and share content without a direct intermediary
- *media* implies storage and transmission of messages around and about content
- *social* describes the one-to-many and many-to-many conversations.

Bradley, A. J. and McDonald, M. P. (2011). The Social organization: How to use social media to tap the collective genius of your customers and employers, Harvard Business Review Press.



Cognitive surplus

Clay Shirky's believes that new technologies enabling shared online work and loose collaboration and taking advantage of 'spare' brainpower will change the way society works.

Cognitive surplus: ability of the world's population to volunteer, contribute and collaborate on large scale and sometimes global projects – and that this cognitive surplus can have societal benefits.

Shirky, C. (2010) Cognitive surplus: creativity and generosity in a connected age, Allen Lane.

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Social media: advantages

- Social media is transforming one-way monologues into collaborative dialogues and interactions.
- democratising information and knowledge: it involves everyone, everywhere, in all-the-time conversations.
- helps to weave communities
- encourage greater openness and transparency
- accelerate information sharing, help to access diverse perspectives
- mobilise people
- stimulate collaborative knowledge building and reduce the cost of participation and co-ordination of resources and actions.

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Social media: disadvantages/risks



- become echo chambers making it difficult to hear distinct and different voices, or have polarised discussions
- most often 'half-baked' ideas are made public, or mis-information and rumours can spread which are unfiltered by professionals and this reduces the credibility of these sources
- can distract from deep reflection and cause information overload as individuals respond to frequent interruptions.
- security and privacy breaches, identity theft, online bullying and disclosure of embarrassing personal information
- employers and prospective collaborators look at the social media profiles of the candidates

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Role of social media in teaching and research dialogues



"The real value of social media for scientists (aside from teaching us to communicate concisely) may be that we are forced to think about how to share ideas with a broader audience, one that ultimately pays for most of our research: taxpayers.

Public conversations about our research make scientists accountable for delivering something of value to those taxpayers. In an era of budget cutting, early-career scientists will have to be effective ambassadors for the profession. This might manifest in conversations with family members or with strangers sitting next to us on a plane, or it might mean posting videos on YouTube or blogging about our ongoing research.

The days of scientists communicating only with each other, in the languages of our individual disciplines, and relying on science journalists to translate for the public, are rapidly coming to an end."

[G. Small in Nature, vol. 479, page 141]

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Your online presence



“Social media is not just for socializing.

When handled correctly, you can use it to enhance your personal brand, establish your expertise, or demonstrate your digital fluency.

Commit to using social media for professional reasons and be proactive about managing your activity and image.

Consider what potential employers or colleagues will see - you don't want them to discover only pictures of you and your dog, or worse.

Make sure at a minimum you have a LinkedIn account with a completed profile.

Try tweeting or blogging about your area of expertise, thereby creating content that others can forward, re-tweet, or repost.

This can help you establish yourself as an expert in your field.”

[Harvard Business Review Management Tip, 9 March 2012]

<http://hbr.org/tip/2012/03/09/know-the-basics-of-putting-your-professional-self-online> [accessed 10th July 2012]

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Perceptions of social media tools in teaching and research



- Face-to-face interactions with supervisors and peers are key
- Email is the most important tool
- Educators and researchers introduce one another to technologies

*I joined Twitter because it was another social media platform, and there is a little bit of pressure on 'new academics' to use social media tools to share, promote and discuss their research. The department was pushing the idea of 'digital scholars' and 'digital scholarship' so I think I was exposed to the idea from early on. Then another PhD student suggested it was useful for his research, so I decided to try it as well. **[PhD student]***

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Perceptions of social media tools in teaching and research



- Advantages of participating in and interacting with social media tools

*It was also very good to follow conferences. There are always a few people at conferences now who will twitter about talks. You can then get names of papers and authors from them. **[post-doctoral researcher]***

- Use of social media tools to create a professional profile

*I use blog as a website...a place that I can keep it updated with the research ideas and events in my specialized area... it is like having a web presence for my research that I can myself edit...I have kept it very simple...a blog for me is a platform to show that the work is in progress...WordPress is easy to use; once you set up the parameters, you are ready to go... **[post-doctoral researcher]***

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Perceptions of social media tools in teaching and research



- Bridging the geographical distance with part-time research students

*I {try to} blog about my research on a private blog, talk with my advisors on Skype once a month, and meet them face-to-face once a year. ...It is difficult to blog every week. But it's a useful tool to update advisors without talking to them. The content also stays on the blog for my use/review later on. **[part-time PhD student]***

- Bringing dispersed researchers and educators together

*...students who do not live on campus can be part of the discussion and keep up to date with other students; the [Elluminate sessions] are hosted during 'off-hours', usually during the evening to accommodate for people who have full-time day jobs **[post-doctoral researcher]***

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Perceptions of social media tools in teaching and research



- Concern about the time spent on social media tools
- Preference for traditional mailing lists

I feel overwhelmed with the discussions in specialist groups on LinkedIn. I much rather prefer the closed traditional mailing lists with less traffic and more useful discussions. [post-doctoral researcher]

- Maintaining professional and personal boundaries

I have upset at least one person who is a professional researcher in my field who wanted to be my friend in Facebook but I refused on the grounds that while we had communicated regarding research in the past and I would be interested to continue to do so I did not consider him to be a social friend. He was offended by this... [post-doctoral researcher]

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Technologies to support research activities



- formal dialogue with supervisors
- informal interactions with peers and supervisors
- document sharing and storage
- space for reflection; working with ideas and the process
- engaging with the community
- keeping yourself informed

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Formal dialogue with supervisors



Picture courtesy: <http://www.flickr.com/photos/somewhatfrank/2186108944/>

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Formal dialogue with supervisors



- e-mail
- [Skype](#) (audio/video conferencing tool)
- [Google chat](#) (audio/video conferencing tool)
- [Elluminate](#) (Blackboard collaborate) (collaborative and conferencing tool)
- SMS messages for quick queries or news alerts
- [Wiki](#) (wiki software: e.g. [Moodle](#), [MediaWiki](#))
- [Flash Meeting](#) (video conferencing tool)
- [Second Life](#) (avatar-based 3D virtual world)

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Informal interactions



Picture courtesy: <http://www.flickr.com/photos/andreassolberg/2301946389/in/photostream/>

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Informal interactions



- [Twitter](#) (micro-blogging service)
- Social networking platform (e.g. [Ning](#), [Facebook](#))
- [Wiki](#)
- [Blogs](#) (blogging software: [WordPress](#))
- [Elluminate](#) (collaborative and conferencing tool)
- [Cloudworks](#) (useful if conducting research in technology-enabled learning)
- [Social Learn](#) (learning network)
- [Second Life](#) (avatar-based 3D virtual world)

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Document sharing and storage



Picture Courtesy: <http://www.flickr.com/photos/iffinkarma/112531388/sizes/o/>

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Document sharing and storage



- [Wiki](#) (wiki software: e.g. Moodle, MediaWiki)
- [Blogs](#) (blogging software: [WordPress](#))
- Academic reference management system (e.g. [EndNote](#), [Mendeley](#), [Zotero](#))
- [Delicious](#) (social bookmarking tool)
- [Slideshare](#) (share presentations, documents and professional videos)
- shared folders on servers in the institution
- sharing of files on the Web (e.g. [Dropbox](#), [box.net](#))

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Space for reflection and working with ideas



Picture courtesy: Professor Marian Petre, Centre for Research in Computing, The Open University, UK

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Space for reflection and working with ideas



- [Blogs](#) (blogging software: [WordPress](#))
- [Twitter](#) (micro-blogging service)
- Mind-mapping software (e.g. [FreeMind](#))
- [Omnigraffle](#) (diagramming software)
- [FlashVlog](#) (online video diaries)
- [Wordle](#) (creating word clouds)
- [YouTube](#) (to share videos)
- Connecting ideas and arguments (e.g. [Cohere](#), [Compendium](#))

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Engaging with the community



Picture courtesy: <http://www.flickr.com/photos/codeworks/4774819822/>

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Engaging with the community



- [Wiki](#)
- [Blogs](#)
- [Delicious](#) (social bookmarking tool)
- [SlideShare](#) (share presentations, documents and videos)
- [Scribd](#) (sharing documents and presentations)
- [LinkedIn](#) (professional networking and groups)
- [YouTube](#) (to share videos)

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Keeping yourself informed



Picture courtesy: Andy Hendry, OU Photo Library

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Keeping informed



- [iTunesU](#) (listen to and view lectures, videos)
- [YouTube](#) (view videos)
- The Open University's [PhD skills website](#) (requires OU user name and password for access)
- [Elluminate](#) (view recorded lectures)
- [Ted Talks](#) (view talks by experts)
- [RSS feeds](#) and [Google Reader](#) (a way to be kept informed of updates to Web content)

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3D virtual worlds



Workshop

Supervision
meeting



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Profile of technology use



Sammy Social:

Sammy maintains a shared folder in **Dropbox** to share documents with advisors.

He uses **RSS feeds** and **Google Reader** to keep himself updated with the online articles and news stories related to his research.

He uses **Zotero** for managing literature sources.

He uses **Twitter** to track stories and discussions in his research area by searching via hashtags.

He reflects by talking with his peers over **Skype** or in face-to-face situations.

Challenges for educators and researchers



- Choice of the social media tools?
- Is it worth your time?
- Ethical, moral or legal issues of your interactions?
- Creating a educator's and/or researcher's profile?
- How do you maintain professional boundaries?

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Challenges in creating and maintaining a social media strategy



- managing social capital
 - with whom do you connect? should work colleagues be your Facebook friends?
- managing intellectual capital
 - which information you should or should not disclose?
- managing your progress
 - how do you maintain momentum? keeping track of how many useful connections you make each month or the number of ideas you develop as a result of online (social media) interactions

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Developing a social media strategy



- Personal and private: Facebook, Flickr, blogs
- Professional and private: VLE, blogs and wikis within the institution's firewalls, discussion forums
- Personal and public: personal blog, Flickr, personal Twitter account, YouTube
- Professional and public: LinkedIn, Scoop.it, Slideshare, Mendeley

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Checklist for creating a social media strategy



1. Are your goals professional, personal or both?
2. Who is your audience?
3. What would you like to communicate?
4. What are you hoping to learn?
5. How big do you want your presence to be?
6. Who do you want to connect to? should work colleagues be your Facebook friends?

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Checklist for creating a social media strategy



7. How often would you like to connect? Are you expecting to give monthly updates or more frequent than that?
8. What resources do you have? would setting up a presence as a research group be better?
9. Do you need technical support?
10. Is there a return on investment?

*I think Twitter has pointed me to some articles, which I may not have found on my own. It has a similar effect as talking to people and attending talks. You will get exposed to different ideas, which you can then follow-up on. **[post-doctoral researcher]***

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Ten tips for social networking



1. Create and maintain a consistent professional profile
2. Choose 'few' tools to do 'more'
3. Conduct regular evaluations of the tools that you use
4. If a particular tool is not providing value, don't hesitate to give it up
5. Keep your purpose and audience in mind

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Ten tips for social networking



6. Take care in not overloading your followers
7. Consider setting up two accounts to separate personal and professional profiles and updates
8. Schedule time for social media
9. You can make use of the social media content through subscriptions or through searches
10. Remember that social media is not the only form of communication

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Digital professionalism



- *E-professionalism* or *digital professionalism* is defined as the attitudes and behaviours reflecting traditional professionalism paradigms that are manifested through digital media.
- appropriateness for public consumption, and individual or institutional representation in digital media content

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Guidelines for digital professionalism



- Keep the online profile(s) accurate and up to date
- Keeping it authentic (honesty)
- Manage access to different parts of your profile
- Maintain professional boundaries
- Monitor your online reputation

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Guidelines for digital professionalism



- Reflect on how your actions will reflect on your profession and institution
- Play by the rules
- Be aware of the permanence of online content
- Remember your audience (intended or unintended)
- Maintaining privacy of the research participants

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Guidelines for digital professionalism



- Timeliness is the key
- People who use Twitter, Facebook, or another social channel regard timeliness in response as far more important than getting a polished answer.

"You've got to be in it to win it. Don't create a profile on LinkedIn and let it atrophy...The smart people are using the information that crosses their screen every day to reach out to people and to recognize windows of opportunity while they are open, or even before they open."

[Uzelac, E. (2011) Mastering Social Media, Research Magazine, pp. 45-47]

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Teaching digital professionalism



- Organise events to educate students and early career researchers
- Organise seminars on digital professionalism to raise their awareness of the positive and negative outcomes of using social media.
- Define digital professionalism in the context of the discipline
- The expectations from a medical or nursing student could be quite different from, say, a researcher in social sciences
- Assign mentors

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Teaching digital professionalism

- Develop institutional policies or departmental policies
- Discuss potential risks of online content
- Make the educators and researchers aware of the permanence of online content, risks to future job opportunities, damaged relationships with members of the research community.
- Improve the visibility of researchers who are already engaging with social media
- Highlighting existing initiatives within the institution will help motivate less engaged researchers and supervisors.

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Checklist for social media etiquette

- Be conscious of your online persona
- Add a profile picture
- Set up professional boundaries
- Engage in a dialogue
- Be authentic
- Be polite

“Stay away from social media sites when you are feeling emotional. “Intelligence goes down when emotions are high”

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Social media etiquette



- Be generous

“the interesting thing about social media is it’s a give-to-get environment; if you come at it with a what-am-I-going-to-take-way-from-this-attitude, you are already behind the curve.”

- Play by the rules
- Don’t overload your network
- Think before you post
- Don’t ignore questions

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Social media etiquette



- Cite references
- Protect confidential information
- Offer information of value
- Time your requests
- Keeping it up-to-date
- Take responsibility
- Don’t be quick to judge

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Challenges of Cloud Computing



- is the confidentiality of the information adequately protected: where is the data stored?, how and to where it could be moved?, where are the backups/copies kept?
- What happens to the privacy of the data that is placed in the cloud?
- How secure is the data in the cloud?
- How do we ensure the trustworthiness of those who manage the cloud? Are the cloud providers tracking data and usage to deliver advertisements?

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Privacy concerns



- *Privacy is a concern when using Dropbox, so I use it mostly for sharing documents when it would be inconvenient to send by email (e.g. when the file size is large or software code).*
- *However, data collected from participants will never be put in Dropbox, we usually keep it in encrypted containers using open-source encryption tools such as TrueCrypt. **[post-doctoral researcher]***

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Challenges of Cloud Computing



- How can you ensure that your data will be available when you need it?
- Who owns the data in the cloud? Can you ensure that the data remains within the country?
- Does the cloud service provider's Terms of Service address confidentiality and security?

*[Safe in the cloud? Online service risks need care and coverage,
<http://tinyurl.com/7rmmxsw> accessed 10 July 2012]*